

***California
Commission on Teacher Credentialing***

***Meeting of
January 8, 2004***

AGENDA ITEM NUMBER: **PERF – 1**

COMMITTEE: **Performance Standards Committee**

TITLE: **Recommended Subject Matter Requirements for Single
Subject Teaching Credentials in Art, Languages Other
Than English, Music, and Physical Education, and the
Preliminary Educational Technology Examination**

 X **Action**

 Information

 Report

Strategic Plan Goal(s):

Goal 1: **Promote educational excellence through the preparation and certification of
professional educators**

- Sustain high quality standards for the preparation of professional educators
- Sustain high quality standards for the performance of credential candidates

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Recommended Subject Matter Requirements for Single Subject Teaching Credentials in Art, Languages Other Than English, Music, and Physical Education, and the Preliminary Educational Technology Examination

Professional Services Division

January 8, 2003

Executive Summary

This report presents recommended subject matter requirements (SMRs) for Single Subject Teaching Credentials in art, languages other than English, music, and physical education, and for the preliminary educational technology examination. If adopted by the Commission, the SMRs will specify the content that is eligible for assessment for the subject matter examinations and that is to be taught in Commission-approved subject matter programs. For preliminary educational technology, the SMRs will only serve as content specifications for the new technology examination. The SMRs were drafted by subject matter advisory panels, reviewed by independent panels for alignment with the student academic content standards and for potential bias, evaluated by California educators statewide, and then finalized by the panels.

Policy Issues to be Considered

What subject matter knowledge, skills, and abilities should candidates for Single Subject Teaching Credentials in art, languages other than English, music, and physical education, and preliminary educational technology have?

Fiscal Impact Summary

The development and administration of the new examinations will be conducted by National Evaluation Systems, Inc, (NES) pursuant to a “no cost” contract agreement with the Commission. The scope of work in the contract also includes program standards development. The contractor will be compensated completely and directly by examinees through test fees. A portion of the test fee collected by NES will be returned to the Commission’s test development fund. These funds are used to support the Commission’s ongoing test development work (e.g., salaries, operating expenses).

Recommendation

Staff recommends that the Commission adopt the proposed subject matter requirements for Single Subject Teaching Credential candidates in art, languages other than English, music, and physical education, and for the preliminary educational technology examination found in Appendix B.

Recommended Subject Matter Requirements for Single Subject Teaching Credentials in Art, Languages Other Than English, Music, and Physical Education, and the Preliminary Educational Technology Examination

Professional Services Division

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Background

The Subject Matter Competence and Technology Requirements for a Teaching Credential

In California, Single Subject Teaching Credentials are offered in the following subject areas: agriculture; art; biological science; business; chemistry; English; Earth and planetary science; health science; home economics; industrial and technology education; languages other than English; mathematics; music; physical education; physics; and social science.

California requires teacher candidates to demonstrate competence in the subject matter they will be authorized to teach. Single subject candidates have two options available for satisfying this requirement. They can either complete a Commission-approved subject matter preparation program or they can pass the appropriate Commission-adopted subject matter examination(s). Because both satisfy the same requirement, these two options should be as aligned and congruent as possible.

The subject matter requirements (SMRs) are the subject-specific knowledge, skills, and abilities needed by beginning teachers. As such, the SMRs for the subject areas of art, languages other than English, music, and physical education serve as the content specifications for subject matter programs and examinations.

In the early 1990s, the Commission developed and adopted standards for subject matter preparation programs and, at the same time, specifications for the subject matter examinations. This work was based on the advice of subject matter advisory panels and data from validity studies, and resulted in program standards and examination specifications that were valid and closely aligned with each other.

Established validity of the subject matter requirements (i.e., program standards and exam specifications) is not permanent. The need for periodic validity studies of the SMRs is directly related to one of the Commission's fundamental goals: to provide a strong assurance that teaching credentials are awarded to individuals who have learned the most current knowledge, skills, and abilities needed to succeed in California public school teaching positions. The validity of the exam specifications and program standards used by the Commission was established in conjunction with their initial development. Professional practice and legal defensibility require, however, that the validity of subject matter requirements be periodically re-established, as job requirements and expectations change over time.

In the late 1990s, the California State Board of Education established K-12 student content standards and/or frameworks (pending standards) for art, languages other than English, music and physical education. SB 2042 (Alpert, 1998) requires the Commission to ensure that subject matter program standards and examinations are aligned with the K-12 student content standards adopted by the State Board.

In June 2002, the Commission adopted the first set of SMRs and program standards in the subject areas of English, biological science, chemistry, Earth and planetary science, mathematics, physics, and social science.

In December 1998, the Commission adopted the Technology Standard for Multiple and Single Subject Teaching Credential candidates. In 2000-01, the Preliminary Educational Technology examination was developed primarily for out-of-state trained teacher candidates to fulfill the basic level technology requirement for the preliminary credential.

The technology standard was replaced subsequently in SB 2042 reform by Standard 9 (*Using Computer-Based Technology in the Classroom*) in teacher preparation and Standard 16 (*Using Technology to Support Student Learning*) in induction. These standards require candidates to demonstrate effective use of technology at a basic level prior to issuance of a preliminary credential and also to demonstrate effective use of technology at an advanced level prior to issuance of a professional credential. The new standards triggered the need to review and validate the content specifications for the examination.

Subject Matter Advisory Panels

In March 2002, the executive director signed a contract with National Evaluation Systems, Inc. (NES) for the development and administration of the new California Subject Examinations for Teachers (CSET) program, which include the development of the preliminary educational technology examination. Due to the large number of subject matter examinations that needed to be developed, the development of the examinations was divided into three phases:

- Phase I: English, mathematics, science (biology, chemistry, Earth and planetary science, and social science)
- Phase II: art, languages other than English, music, physical education, and preliminary educational technology
- Phase III: agriculture, business, health, home economics, and industrial and technology education

With the adoption of the passing standards for the CSET Science (Specialized) examinations in December 2003, the work of the Phase I advisory panels was completed.

In spring 2003, the Commission's executive director appointed subject matter advisory panels for the single subject areas in art, languages other than English, music, physical education, and for preliminary educational technology to advise Commission staff on the development of new subject matter program standards and examinations in these subject areas.

The subject matter advisory panels consist of:

- classroom teachers of the subject area,
- subject area specialists in school districts, county offices of education, and postsecondary institutions,
- professors in the subject area teaching in subject matter preparation programs,
- teacher educators,
- members of relevant professional organizations, and
- members of other relevant committees and advisory panels.

NES began working with Commission staff and the Phase II advisory panels in May 2003 to develop and validate SMRs for prospective secondary teachers in art, languages other than English, music, physical education, and for preliminary educational technology. At the panels' initial meeting, staff provided and discussed a written "charge" to the panels describing their responsibilities and characteristics of the SMRs. These materials are attached in Appendix A. Once adopted by the Commission, the SMRs will specify the content that is to be taught in Commission-approved subject matter preparation programs and that is eligible for assessment on the Commission's subject matter examinations. For preliminary educational technology, the SMRs will serve only as the content specifications for the new examination.

Development and Validation of the SMRs

For the past eight months, Commission staff, NES, and the advisory panels in art, languages other than English, music, physical education, and preliminary educational technology have met numerous times to work on the development of the new SMRs and program standards.

In May and June 2003, for each of their respective subject areas, panels developed preliminary SMRs aligned with available state and national student content standards and frameworks, and standards of national professional organizations. The following five sets of SMRs have been developed:

- art
- languages other than English, which includes
 - French
 - German
 - Japanese
 - Korean
 - Mandarin
 - Punjabi
 - Russian
 - Spanish
- music
- physical education
- preliminary educational technology

The preliminary SMRs for these subject areas were independently reviewed by two separate groups in July and August 2003. A Bias Review Committee reviewed all SMRs for potential bias, such as those of gender, race, culture, ethnicity, and socio-economic status. Then

Alignment and Congruence Panels composed of content experts reviewed the art, music and physical education SMRs for alignment with the state-adopted K-12 Student Academic Content Standards. Following these reviews, changes in SMRs suggested by these two groups were presented to and acted on by the subject matter panels.

In September and October 2003, NES launched a statewide survey-based validity study of the preliminary SMRs developed by the panels. Both paper and electronic surveys were administered, and participants included California credentialed teachers, principals, curriculum specialists, and college/university faculty. Surveys were developed for each of the five content areas. Eligibility requirements were established and applied. The surveys asked eligible respondents to make judgments about the preliminary SMRs. For each SMR, respondents were asked to indicate (1) how important the SMR is for effective job performance by a teacher of the subject area; and (2) whether it represents knowledge, skills, and abilities that teachers must possess at the *beginning* of their teaching career (as opposed to knowledge, skills, and abilities that could be learned on the job).

Approximately 16,000 California educators were selected or invited to complete a survey. Survey responses were received from 4,664 (29%) educators. The surveys were screened for eligibility, and 3,452 (2%) were used in the compilation of data for the study.

The validity study generated qualitative feedback, a majority of which supported the SMRs. NES analyzed and summarized the results of the validity study and presented the results to the advisory panels on December 8-9, 2003. The knowledge, skills, and/or abilities in the SMRs that did not receive strong support from the study were reviewed according to guidelines developed by Commission staff. Reviewed SMRs could be retained, revised, or deleted, and could be retained only under specified conditions. For example, if the panel unanimously agreed and documented a strong, clear relationship between the knowledge, skills, and/or abilities in the statement and one or more specific student academic content standards, and/or framework concepts, the SMR was retained. Only three types of SMR revisions were accepted: deletion of subject matter knowledge, skills, and/or abilities, minor rewording for clarification, or nonsubstantive additions. No new subject matter could be added to an SMR as a result of the validity research.

On December 10, 2003, following the panels' review of the validity study results, the Commission's Bias Review Committee reviewed the SMRs a second time. Commission staff and selected panel members resolved any bias related issues before finalization of the recommended SMRs.

Recommended Subject Matter Requirements for Single Subject Teaching Credentials in Art, Languages Other Than English, Music, Physical Education, and for the Preliminary Educational Technology Examination

Final SMRs for art, languages other than English, music, physical education, and preliminary educational technology recommended by staff for adoption by the Commission are found in Appendix B. Each set of SMRs includes two parts. The first part describes several *content domains* for subject matter understanding and skill, and the second part describes the subject matter *skills and abilities* applicable to the content domains.

Future Plans for Phase II

Commission staff and NES will continue to work with the advisory panels to develop the new CSET examinations through spring 2004. Initial administrations of the new examinations are scheduled for fall 2004. NES will conduct standard setting studies for these CSET examinations after each initial test administration. Results of these studies will be presented to the Commission with recommended passing standards. Due to this process, scores for the first two administrations of the new exams will be available to examinees four months after the initial test administration.

The SMRs serve as the basis for the content of the subject matter program standards. The program standards developed by the subject matter advisory panels will be posted on the Commission website and mailed to the field mid-January 2004. The field review will include K-12 California credentialed teachers, high school department chairs, college deans, directors of teacher education, academic deans, County Offices of Education, and professional organizations. The field review surveys will be returned to the Commission by March 1, 2004. The results will be tabulated by staff and reviewed by the advisory panels on March 24-25, 2004. Staff expects to present the program standards for consideration of approval at the May 6, 2004 Commission meeting. Following approval of the standards, staff will proceed with the implementation process as established by the Commission last year in Phase I of the CSET project.

Phase III Development

The Phase III development of SMRs and examinations, which include the subject areas of agriculture, business, health, home economics, and industrial and technology education, will begin in spring 2004, with the target date for initial test administration in fall 2005. Currently, Commission and NES staff is in the initial planning stages for the development work. Recruitment for advisory panels is in progress.

Appendix A

**Written “Charge” to the Subject Matter Advisory Panels,
Including Characteristics of the Subject Matter Requirements (SMRs)**

COMMISSION ON TEACHER CREDENTIALING

1900 Capitol Avenue
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Charge to the Subject Matter Advisory Panels in Art, Music, Physical Education, and Languages Other Than English

May 2003

The Executive Director of the California Commission on Teacher Credentialing has appointed the Subject Matter Advisory Panels in art, music, physical education, and languages other than English (LOTE) to work with and advise the Commission's staff and contractor to accomplish the following the task:

Develop new *Standards of Quality and Effectiveness for Subject Matter Programs* in each of four subject areas. An important element of the new standards will be a delineation of the subject-specific knowledge, skills, and abilities that beginning teachers need to know and be able to do. These will be referred to as *subject matter requirements*.

The new standards will guide sponsors of subject matter programs for prospective teachers. The subject matter requirements will delineate the subject-specific knowledge, skills, and abilities (a) to be taught in programs and (b) eligible for assessment on exams candidates can take in lieu of completing programs.

The program standards and subject matter requirements shall take into account the context for California K-12 public education, best practices in subject-matter pedagogy, and the knowledge base and methods of the disciplines under consideration.

The work and products of each panel shall be:

- Focused on the subject matter preparation of candidates for California Single Subject Teaching Credentials.
- Informed by the knowledge and expertise of its members, previously adopted program standards, the new Elementary Subject Matter Program Standards, the Standards Common to All developed in Phase I and adopted by the Commission in June 2002, and all applicable California laws and regulations.
- Aligned with the State-adopted K-12 student academic content standards and curriculum frameworks.
- Compatible with the assumptions, format, and organization of other segments of the Senate Bill 2042 reforms.

Upon their completion, the new *Standards of Quality and Effectiveness for Subject Matter Programs* will be presented to the Commission for adoption.

The New Subject Matter Requirements

The new subject matter requirements in art, music, physical education, and languages other than English must have the following characteristics:

1. They must be aligned with the state's student content and performance standards for grades 6-12. Competence in the new subject matter requirements should enable beginning teachers to effectively assist students to meet the student content and performance standards. Although the new subject matter requirements must be aligned with the student standards, they can be broader than those standards.
2. Their intended purposes and uses are to delineate the subject matter knowledge, skills, and abilities that are (a) to be provided to candidates in a subject matter preparation program, and (b) eligible for inclusion on the exams (i.e., exam content specifications).
3. In terms of their use as exam content specifications, the subject matter requirements should enable (a) examination development specialists to create test items (both selected-response and constructed-response items) that have high validity, (b) Commission staff to monitor the work of examination development specialists in relation to clear, valid content specifications, and (c) candidates for credentials to ascertain clearly the breadth and content of subject matter knowledge, skills, and abilities eligible for assessment on the exams.
4. The new subject matter requirements for each subject area are expected to have two parts. The first part would describe several *content domains* for subject matter understanding and skill, and the second part would describe the subject matter *skills and abilities* applicable to the content domains. (See the subject matter requirements for prospective single subject teachers in art, music, physical education, and languages other than English online at: <http://www.ctc.ca.gov/profserv/progstan.html>.)

Appendix B

Recommended Subject Matter Requirements for Single Subject Teaching Credentials

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Art Subject Matter Requirements

Part I: Content Domains for Subject Matter Understanding and Skill in Art

Domain 1. Artistic Perception

Candidates demonstrate an understanding of the foundations of artistic perception contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001) at an advanced level of proficiency. Candidates have both broad and deep conceptual knowledge of the subject matter and are able to accurately define and use the vocabulary of the visual arts. They possess highly developed perceptual and analytical skills that allow a sophisticated response to the world around them and to the formal and expressive qualities of works of visual art and of design across a multiplicity of forms, media, genres, purposes, and functions.

1.1 Elements of Art

- a. Demonstrate knowledge of the elements of art (i.e., line, color, shape/form, texture, value, space) and how they are used in visual art and design.
- b. Analyze and discuss the characteristics and qualities of the elements of art in given artworks in various media.
- c. Describe how the elements of art are used to achieve specific effects in given works of two- and three-dimensional art.
- d. Analyze and describe how the elements of art are used and how they contribute to meaning or expressive qualities in given artworks.
- e. Apply knowledge of the elements of art to analyze and describe the environment, works of art, and design.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Art: Kindergarten: 1.3, Grade 1: 1.3, Grade 2: 1.2 and 1.3, Grade 3: 1.5, Grade 4: 1.2, 1.3, and 1.5, Grade 6: 1.1, Grade 7: 1.3, Grades 9 through 12–Advanced: 1.6.)

1.2 Principles of Design

- a. Demonstrate understanding of the principles of design (e.g., balance, contrast, dominance, subordination, emphasis, movement, repetition, rhythm, variation, unity).
- b. Identify and describe the principles of design in given visual compositions.
- c. Identify the principles of design as observed in natural and human-made objects and environments.
- d. Analyze how the composition of a work of art is affected by the use of a particular principle of design.
- e. Analyze how various principles of design are used in given works of art.
- f. Analyze how various elements of art are used to illustrate principles of design in given artworks.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 3: 1.1, Grade 4: 1.1, Grade 5: 1.1 Grade 6: 1.4, Grade 8: 1.3, Grades 9 through 12–Proficient: 1.2 and 1.4.)

Domain 2. Creative Expression

Candidates demonstrate an understanding of the foundations of creative expression contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001) at an advanced level of proficiency. Candidates have both broad and deep conceptual knowledge of the process of creating original works of art. They are involved in the translation of thoughts, perceptions, and ideas into visual form using a variety of media, techniques, and problem-solving abilities. Candidates have a comprehensive knowledge of and technical proficiency in the use of tools, techniques, and media taught in the preK–12 and adult school art curriculum.

2.1 Creating Original Art

- a. Identify the artistic problem to be solved and generate a variety of solutions.
- b. Apply divergent thinking processes to the production of original works of art.
- c. Analyze how meaning or expressive qualities of artworks are affected by compositional decisions in various media.
- d. Develop a possible solution to an artistic problem that expresses individual commitment, thematic content, and artistic style and vision; explain the rationale for the choice.
- e. Demonstrate knowledge of appropriate tools, techniques, and materials to create an original work of art.
- f. Articulate the process and rationale for refining and reworking a work of art.
- g. Analyze the intent, purpose, and technical proficiency of an artwork based on the elements of art and principles of design.

2.2 Two-Dimensional Art and Design

- a. Demonstrate knowledge of materials, tools, and techniques used in drawing (e.g., contour, gesture, perspective).
- b. Demonstrate knowledge of materials, tools, and techniques used in painting (e.g., tempera, acrylic, oil, watercolor).
- c. Demonstrate knowledge of materials, tools, and techniques used in printmaking (e.g., relief, screenprinting, lithography, intaglio).
- d. Apply knowledge of the elements of art and principles of design to create and express meaning in original two-dimensional works of art and of design.
- e. Demonstrate knowledge of safety issues associated with materials, tools, and techniques used in the production of two-dimensional art.
- f. Demonstrate knowledge of the uses of appropriate technological tools in two-dimensional art (e.g., overhead/slide projector, printmaking press, computer, scanner).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Kindergarten: 2.1 and 2.3–2.6, Grade 1: 2.1, 2.2, 2.4, 2.8–2.8, Grade 2: 2.1–2.5, Grade 3: 2.2–2.4, 2.6 Grade 4: 2.1–2.2, 2.5–2.8 Grade 5: 2.1, 2.3, Grade 6: 2.2–2.5, Grade 7: 2.2–2.4, Grade 8: 2.1, Grades 9 through 12–Proficient: 2.4. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 2.)

2.3 Three-Dimensional Art and Design

- a. Demonstrate knowledge of techniques (e.g., additive, subtractive, casting) used in sculptural processes.
- b. Demonstrate knowledge of materials and tools used in three-dimensional art (e.g., wood, stone, metal).
- c. Demonstrate knowledge of materials and tools used in ceramics (e.g., hand-built, wheel-thrown, decorative techniques).
- d. Apply knowledge of the elements of art and principles of design to create and express meaning in original three-dimensional works of art and of design.
- e. Demonstrate knowledge of safety issues associated with materials, tools, and techniques used in the production of three-dimensional art.
- f. Demonstrate knowledge of the uses of appropriate technological tools in three-dimensional art (e.g., kiln, potter's wheel, power tools).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Kindergarten: 2.2 and 2.7, Grade 1: 1.2, Grade 4: 2.3, 2.4, Grade 5: 2.5, Grade 8: 12.2.2, 2.4, and 2.6, Grades 9 through 12–Proficient: 2.2. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 2.)

2.4 Media Art

- a. Demonstrate knowledge of materials, tools, techniques, and procedures used in photography.
- b. Demonstrate knowledge of materials, tools, techniques, and procedures used in film and animation.
- c. Demonstrate knowledge of materials, tools, techniques, and procedures used in the manipulation of digital imagery (e.g., computer-generated art, digital photography, videography).
- d. Apply knowledge of the elements of art and principles of design to create and express meaning in original works of media art.
- e. Demonstrate knowledge of safety issues associated with materials, tools, and techniques used in the production of media art.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 5: 2.3, Grade 6: 2.6, Grade 7: 2.6, Grade 8: 2.1 and 2.3, Grades 9 through 12–Proficient: 2.3. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 2.)

2.5 New and Emerging Art Forms

- a. Demonstrate knowledge of materials, tools, and processes used in new genres of art (e.g., site-specific, installation, environmental, performance, multimedia).
- b. Apply knowledge of the elements of art and principles of design to create and express meaning in original works of visual art in new genres.
- c. Demonstrate knowledge of safety issues associated with materials, tools, and techniques used in the production of artworks in new genres.
- d. Demonstrate knowledge of documentation techniques used in the creation and installation of works of visual art in new genres.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 8: 2.7, Grades 9 through 12–Advanced: 2.6. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 2.)

Domain 3. Historical and Cultural Context of the Visual Arts

Candidates demonstrate an understanding of the historical and cultural foundations of art contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001) at an advanced level of proficiency. Candidates have both broad and deep conceptual knowledge of the subject matter including cultural frames of reference and worldviews. They demonstrate wide knowledge of world arts, of the history and diversity of art, and of the roles and forms of the visual arts in societies past and present.

3.1 Visual Art and Society

- a. Demonstrate knowledge of how visual art is used to communicate ideas or document experiences.
- b. Demonstrate knowledge of how visual art is used to express emotions and share experiences (e.g., rites of passage, celebrations).
- c. Recognize the influences of the visual arts on communities.
- d. Analyze themes and ideas expressed in art (e.g., religion, social commentary).
- e. Demonstrate knowledge of the relationships between technological tools and visual art.
- f. Analyze the purposes of art in societies past and present.
- g. Analyze diverse social, economic, and political developments (e.g., feminism, environmentalism) reflected in works of past and present art.
- h. Analyze ways in which the works of contemporary artists reflect, play a role in, and influence present-day culture.
- i. Demonstrate knowledge of the roles and functions of arts agencies and institutions (e.g., arts councils, art museums, galleries, collectors).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 2: 3.3, Grade 4: 3.2, Grade 5: 3.1, Grades 9 through 12–Proficient: 3.4, Grade 9 through 12–Advanced: 3.1-3.2. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standards 3 and 4.)

3.2 World Arts

- a. Demonstrate knowledge of artworks and artists, both male and female, in terms of their role and social context, from various times, places, and cultures.
- b. Recognize the characteristics of art forms from various times, places, and cultures (e.g., fine art, traditional art, folk arts).
- c. Analyze how artworks from various times, places, and cultures reflect features and characteristics of those societies.
- d. Identify similarities and differences among art forms or art objects from various times and places within and across cultures.
- e. Recognize how artworks from various times, places, and cultures both reflect and influence society.
- f. Demonstrate knowledge of the cultural contributions of various native, immigrant, and underrepresented groups to the art of the United States.
- g. Compare and contrast utilitarian and nonutilitarian artworks across times, places, and cultures.
- h. Analyze how artworks from different cultures past and present have contributed to California's history and art heritage.
- i. Identify major works of art created by women and describe the impact of those works on society at that time.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Kindergarten: 3.3, Grade 1: 3.1, 3.3–3.4, Grade 2: 3.2–3.3., Grade 3: 3.1–3.2, 3.4–3.5, Grade 4: 3.2, Grade 5: 3.2–3.4, Grade 6: 3.1–3.2, Grade 7: 3.1–3.2, Grade 8: 3.1–3.4, Grades 9 through 12–Proficient: 3.1. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 4.)

Domain 4. Aesthetic Valuing

Candidates demonstrate an understanding of aesthetic valuing in art as contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001) at an advanced level of proficiency. Candidates have both broad and deep conceptual knowledge of the subject matter. They are able to respond to, analyze, interpret, and critique processes and works of visual art representing a wide diversity of forms, media, purposes, and functions. Candidates are able to make sound critical judgments about the quality and success of artworks, relying on their own experiences in and perceptions about the visual arts as well as the perceptions of others.

4.1 Derive Meaning

- a. Demonstrate knowledge of the relationship involving the art maker (artist), the making (process), the artwork (product), and the viewer.
- b. Demonstrate knowledge of the use and interpretation of symbols in the visual arts.
- c. Analyze the intentions and motivations of artists creating works of visual art.
- d. Analyze and articulate how form and content influence the interpretation and message of a work of visual art.
- e. Analyze and describe how society and culture influence the message of a work of art and its interpretation.

- f. Understand factors that influence the perception of art (e.g., personal beliefs; cultural traditions; past and present social, economic, and political contexts).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grades 9 through 12–Proficient: 4.1–4.3. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 3.)

4.2 Make Informed Judgments

- a. Apply knowledge of the elements of art and principles of design to describe similarities and differences in works of art and in the environment.
- b. Demonstrate knowledge of various aesthetic theories (e.g., deconstructionism, formalism, cultural perspectives) to critique one's own and others' artworks.
- c. Construct rationales for the validity of specific artworks and aesthetic theories outside one's own conceptions of art.
- d. Employ current and emerging art criticism models in writing and speaking about works of art.
- e. Develop and apply strategies and criteria to assess and critique a creative process and its resulting work of art.
- f. Develop criteria with a rationale for the selection of a body of work from one's own portfolio that represents significant achievements.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 8: 4.4, Grades 9 through 12–Proficient: 4.5, Grades 9 through 12–Advanced: 4.4–4.6. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard 3.)

Domain 5. Connections, Relationships, and Applications

Candidates demonstrate an understanding of art connections, relationships, and applications contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001) at an advanced level of proficiency. Candidates have both broad and deep conceptual knowledge of the subject matter. They understand connections and relationships between visual art and the other arts, as well as those between visual art, other disciplines, and the world at large. Candidates possess a high degree of visual literacy. They are familiar with the broad range of career opportunities available in the field of visual art, as well as with the roles and functions of visual art in a variety of professions and industries.

5.1 Connections and Applications Between Visual Arts and Other Disciplines

- a. Demonstrate knowledge of the common or interrelated concepts, areas of concern, and methods of inquiry among the arts disciplines.
- b. Demonstrate knowledge of content-specific connections between visual arts and one or more major subject areas.

- c. Demonstrate knowledge of how to substantively integrate visual art with other subject areas.
- d. Demonstrate knowledge of how art can be used to gain and express learning in other disciplines.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 2: 5.1, Grade 3: 5.1, Grade 4: 5.1–5.3, Grade 6: 5.1, Grade 7: 5.1, Grade 8: 5.1, Grades 9 through 12–Proficient: 5.1, Grades 9 through 12–Advanced: 5.1–5.2. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standards 6 and 7.)

5.2 Visual Literacy

- a. Recognize how different visual representations of the same object or event can lead to different interpretations of meaning.
- b. Analyze uses of visual images and symbols to communicate and persuade (e.g., advertising, propaganda).
- c. Demonstrate understanding of how visual communication media (e.g., television, music videos, film, Internet) influence all aspects of society.
- d. Compare and contrast works of art, probing beyond the obvious and identifying content (e.g., psychological, metaphorical, cultural) found in the symbols and images.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 6: 5.4, Grade 8: 5.3, Grades 9 through 12–Proficient: 5.3, Grades 9 through 12–Advanced: 5.2.)

5.3 Art Careers and Career-Related Skills

- a. Demonstrate knowledge of careers in the visual arts.
- b. Analyze the relationship between commercial products (e.g., appliances, home furnishings, automobiles) and careers in art.
- c. Demonstrate awareness of the skills required in art-related careers (e.g., designer, curator, animator, interactive game developer, photographer).
- d. Demonstrate knowledge of what various types of artists (e.g., architects, product designers, graphic artists, illustrators) produce and how their works play a role in the everyday environment.
- e. Demonstrate knowledge of how portfolios can be used for a variety of career-related purposes.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: Grade 2: 5.4, Grade 3: 5.4, Grade 5: 5.3, Grades 9 through 12–Proficient: 5.4.)

Domain 6. History and Theories of Learning in Art

Candidates demonstrate a comprehensive understanding of the history and theories of art education and the role of arts in human development related to the content contained in Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They have in-depth knowledge of proficiency levels and developmental stages in art.

6.1 Art and Human Development

- a. Demonstrate knowledge of the role of the visual arts in human development.
- b. Demonstrate knowledge of how cultural backgrounds, learning styles, and developmental levels are related to learning in the visual arts.

6.2 Theories of Learning in Art

Demonstrate knowledge of current and historical purposes, philosophies, and theories of learning in art.

(Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standards 8 and 9.)

Part II: Subject Matter Skills and Abilities Applicable to the Content Domains in Art

Candidates for Single Subject Teaching Credentials in the visual arts are proficient artists with comprehensive conceptual and technical skills. They are adept in a variety of art media and are able to demonstrate their skill effectively to structure meaningful art experiences. They apply comprehensive knowledge of art criticism; art heritage of cultures from around the world, past and present; aesthetics, including the diversity of global cultural perspectives; and relationships both among the visual arts and between the visual arts and other disciplines.

They know how to incorporate technology into the creative art process. Candidates are also well versed in a variety of techniques and technical skills, aesthetic awareness, critical analytical skills, and proficiency in creative problem solving in the visual arts. Being familiar with various careers available in the field of visual art, they are able to investigate opportunities for pursuing careers in the visual arts.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Visual Arts: All grade levels: Standards 1–5. Art Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standards 2–11. National Board for Professional Teaching Standards [NBPTS] Early Childhood and Middle Childhood Art Standards: Standards 1–6 and 9. National Board for Professional Teaching Standards [NBPTS] Early Adolescence through Young Adulthood Art Standards: Standards 1–8 and 10.)

Languages Other Than English Subject Matter Requirements

Part I: Content Domains for Subject Matter Understanding and Skill in Languages Other Than English

Domain 1. General Linguistics

Candidates demonstrate knowledge of the nature, process, and components of language at the postsecondary level, as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). Candidates demonstrate both broad and deep conceptual understanding of the subject matter, including the universal characteristics of human languages and the ways in which linguistics describes and categorizes language structures. They analyze the processes by which languages change over time, understand how languages vary geographically, socially, and ethnographically, and recognize the family relationships among different languages. Candidates show an awareness of the communicative functions of language and how those functions vary depending upon the context and purpose of communication. They demonstrate a thorough understanding of language acquisition, including the processes by which new languages are acquired and the developmental patterns of language learning, and recognize that language acquisition involves the interrelationship of language and culture.

1.1 The Nature of Language

- a. Demonstrate an understanding of the nature, purposes, and uses of language. For example:
 - ◆ Demonstrate an understanding of the elements of language structure (i.e., phonology, morphology, syntax, semantics) and how they are interrelated.
 - ◆ Demonstrate an understanding of the basic principles of grammar and what is meant by a productive rule of language.
 - ◆ Demonstrate an understanding of the distinction between deep structure and surface structure.
- b. Demonstrate an understanding of the development of language and the significance of language change, including the variations that occur within the contexts of time, place, age, gender, and situation. For example:
 - ◆ Demonstrate an understanding of the classification of languages into families and branches.
 - ◆ Describe different perspectives on the study of language (e.g., synchronic vs. diachronic).
 - ◆ Identify the different types of change that languages undergo at all levels (e.g., phonetic and phonological, morphological and syntactic, lexical and semantic).
 - ◆ Analyze the mechanisms by which language change occurs (e.g., umlaut, phonemic splits and mergers, borrowing, euphemisms, folk etymologies, metaphors, taboos).

1.2 Language Use

- a. Demonstrate an understanding of the principles of pragmatics, discourse analysis, and the theory of speech acts. For example:
- ◆ Demonstrate an understanding of how sentences may be used to communicate more than they literally say.
 - ◆ Analyze principles of structure, regularity, and coherence in extended texts.
 - ◆ Demonstrate an understanding of distinctions between different types (e.g., direct vs. indirect) and varieties (e.g., commands, questions, assertions, exclamations) of speech acts.
 - ◆ Demonstrate an understanding of the functions of speech acts (e.g., to inform, to amuse, to control, to persuade).
 - ◆ Apply concepts of reference, sense, force, tone, and conversational implicature (contextualized meaning) to the analysis of speech acts.
 - ◆ Demonstrate an understanding of the distinction between performative and constative utterances (speech that constitutes an act vs. speech that describes facts or provides information).

1.3 Applied Linguistics

- a. Demonstrate an understanding of theories of language acquisition and learning. For example:
- ◆ Analyze potential differences between learning first and second languages.
 - ◆ Identify the developmental stages through which language learners acquire first and second languages.
 - ◆ Demonstrate an understanding of the cognitive, affective, and social factors that affect second-language acquisition and learning (e.g., the concept of critical period, family and peer attitudes, linguistic interference).
 - ◆ Demonstrate an understanding of how theories of language acquisition can be applied to facilitate language instruction and learning.
 - ◆ Demonstrate an understanding of the creativity and recursive character of human languages.

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.b, 1.c)

Domain 2. Linguistics of the Target Language

Candidates demonstrate a broad and deep knowledge of target-language linguistics at the postsecondary level, as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). Candidates demonstrate an understanding of the languages they teach, including sound systems, the rules by which words are formed, and the ways in which phrases, clauses, and sentences are structured, and can explain the major levels and features of the target-language grammar. They understand articulatory phonetics and are able to describe target-language phonological features, orthography, morphological rules, syntactic patterns, and semantics. Candidates are able to describe the rules for word and sentence formation, as well as the structure, function, and meaning of target-language discourse, including features for producing coherence in spoken and written discourse, pragmatic features, and sociolinguistic features of target-language discourse. Candidates are familiar with rhetorical and stylistic devices, figures of speech, and the levels of language appropriate for various tasks and communicative purposes. In addition, they understand the historical changes in the target language and the variations among regional dialects, including differences in pronunciation, orthography, vocabulary, and grammatical structures, as well as register.

2.1 Language Structures

- a. Demonstrate an understanding of the phonology of the target language. For example:
 - ◆ Describe the segmentals of the target language and their allophones.
 - ◆ Describe the suprasegmentals of the target language (e.g., significant tones, accents, intonation patterns).
 - ◆ Describe the syllable structure of the target language (e.g., CV, CVC).
 - ◆ Describe the phonological and morphophonemic rules of the target language.
- b. Demonstrate an understanding of the orthography of the target language. For example:
 - ◆ Demonstrate an understanding of the principles of the standard system for writing the target language (e.g., alphabets, syllabaries, logographic systems).
 - ◆ Demonstrate an understanding of the origins and development of different systems for writing the target language.
- c. Demonstrate an understanding of the morphology of the target language. For example:
 - ◆ Understand inflectional morphology (e.g., verb conjugations, noun declensions).
 - ◆ Understand derivational morphology (e.g., rules for forming derived and compound words).
 - ◆ Describe strategies for identifying and using new words in the target language by recombining morphemes.
- d. Demonstrate an understanding of the syntax of the target language. For example:
 - ◆ Demonstrate an understanding of the rules that govern the formation of phrases and sentences.
 - ◆ Demonstrate an understanding of the significance of word order in the target language.
 - ◆ Identify ways in which syntactic patterns in the target language can be used to convey nuances of meaning.
 - ◆ Identify linguistic devices used to create connected and cohesive discourse in the target language.

- e. Demonstrate an understanding of the semantics of the target language. For example:
 - ◆ Demonstrate an understanding of how meanings are structured and communicated in the target language.
 - ◆ Demonstrate an understanding of the cultural meaning of words and sentences and the cultural significance of a variety of idiomatic expressions.
- f. Describe changes that occur in the target language over time.

2.2 Error Analysis

- a. Identify, analyze, and correct grammatical and mechanical errors in the target language.

2.3 Contrastive Analysis

- a. Analyze and contrast linguistic structures of the target language and English.
- b. Compare and contrast particular words, idioms, and inflections in the target language and English.

2.4 Sociolinguistics and Pragmatics

- a. Demonstrate an understanding of pragmatic and sociolinguistic features of target-language discourse. For example:
 - ◆ Explain how linguistic choices depend on the setting, goals, and participants in communicative interactions (e.g., the use of honorifics).
 - ◆ Demonstrate an understanding of the influence of social and cultural norms on the use of the target language (e.g., use of formal vs. informal forms of speech).
- b. Demonstrate an understanding of the origins and social implications of accentual and dialectal differences within the target language.
- c. Describe the differences among the varieties of the target language and the factors that account for these differences (e.g., cultural factors, political factors, level of education, gender, social class).

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.b, 1.c)

Domain 3. Literary and Cultural Texts and Traditions

Candidates demonstrate a broad and deep knowledge of literary and cultural texts and traditions, and of their contexts, at the postsecondary level, as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). Candidates are familiar with major literary and intellectual movements, genres, writers, and works. They can analyze, interpret, and synthesize ideas as well as critical issues from a wide range of writers and thinkers across a variety of forms and media. They understand the historical, social, and cultural contexts in which literary and cultural texts were created, the influence of these factors on ideas and forms of expression, and the ways in which those texts both reflect and shape the target culture. Finally, candidates use literary and cultural texts to interpret and reflect upon the perspectives of the target culture over time.

3.1 Major Movements, Genres, Writers, and Works

- a. Demonstrate an understanding of major movements, genres, writers, and works in the literature of the target language.
- b. Demonstrate an understanding of the historical, social, and cultural influences on works of literature in the target language.
- c. Use knowledge of the literary and cultural traditions of the target culture to interpret changes in that culture over time.
- d. Demonstrate an understanding of the ways in which literary and intellectual works and movements of cultures associated with the target language both reflected and shaped those cultures.

3.2 Analysis of Literary and Cultural Texts

- a. Analyze and interpret a wide range of literary and cultural texts (e.g., oral traditions, folk tales, novels, short stories, poetry, drama, history, philosophy, biography, essays, speeches, film, electronic media).
- b. Evaluate the use of language (e.g., register, function) to convey meaning, to inform, to persuade, or to evoke reader response.
- c. Analyze the elements of literary works (e.g., setting, plot, theme, character, tone, style).
- d. Interpret the use of rhetorical and literary techniques (e.g., metaphor, personification).

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 2.a, 2.b)

Domain 4. Cultural Analysis and Comparisons

Candidates possess a broad and deep knowledge of the cultures associated with the target language and demonstrate an understanding of the interrelationships among the perspectives, practices, and products of those cultures at the postsecondary level, as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). Candidates recognize culture as a dynamic, interrelated system and employ a variety of processes to identify, analyze, and evaluate cultural themes, values, and ideas. They are able to explore relationships among cultural perspectives and social institutions, and they understand how cultural practices and products exemplify the perspectives of cultures associated with the target language. Candidates recognize important geographical features and analyze the impact of geographical factors on the development of cultures associated with the target language. They exhibit familiarity with contemporary and historical issues, significant works of art, cultural attitudes and priorities, daily living patterns, and social institutions. They are able to identify the roles and contributions of major political figures, artists, and cultural icons, and references made to them in the culture. Candidates are able to interpret ideas, values, and beliefs that represent the target culture's traditions and contemporary variations and are able to compare and contrast social, historical, and artistic traditions in the target culture with those of other cultures.

4.1 Cultural Perspectives

- a. Demonstrate an understanding of how all of the cultural perspectives within nations and cultures associated with the target language interact to influence the development and evolution of the target cultures (e.g., worldview, core beliefs, values).
- b. Demonstrate familiarity with how the major physical and other geographical features of countries and cultures associated with the target language have influenced the cultures' development and evolution.
- c. Analyze how political factors have influenced the development and evolution of cultures associated with the target language, including the interrelationship between geography and political systems.
- d. Demonstrate familiarity with significant individuals, key eras, and major historical events and developments within nations and cultures associated with the target language, and analyze their influence on the development and evolution of the target cultures.
- e. Demonstrate an understanding of how the political, religious, social, economic, and educational systems and institutions in nations and cultures associated with the target language have been shaped by and have influenced the development and evolution of the target cultures (e.g., traditions, social conventions, social relationships, and social status).

4.2 Cultural Practices

- a. Demonstrate an understanding of how cultural practices exemplify cultural perspectives. For example:
 - ◆ rituals and traditions
 - ◆ social institutions such as marriage and family
 - ◆ social status and social relationships
 - ◆ holidays and festivals
 - ◆ health practices and traditions
 - ◆ patterns of work and leisure
 - ◆ culinary traditions and practices
- b. Analyze cultural stereotypes and their effects on the perceptions of and attitudes toward the target cultures.

4.3 Cultural Products

- a. Demonstrate an understanding of how the products of a target culture exemplify cultural perspectives. For example:
 - ◆ architecture
 - ◆ works of art (e.g., painting, sculpture, handicrafts)
 - ◆ artistic performance (e.g., music, dance, drama)
 - ◆ literature
 - ◆ technology and media (e.g., Web sites, advertisements)
 - ◆ entertainment
 - ◆ fashion
 - ◆ manufactured goods

(American Council on the Teaching Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 2.a, 2.b)

Domain 5. Language and Communication: Listening Comprehension

Candidates demonstrate proficiency in the comprehension of oral messages in the individual target language as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). For individual target languages, candidates may be asked to demonstrate all or some of the following knowledge and skills. Candidates demonstrate the ability to listen effectively and understand oral messages in the target language for various purposes in different contexts, including a variety of text types, and to accurately comprehend ideas and vocabulary across a range of content, including art, literature, politics, society, and current events, as well as everyday communications and interactions. They demonstrate the ability to comprehend and interpret both limited and extended oral messages, including monologues, conversations, news broadcasts, narratives and descriptions in various time frames, speeches, and debates. Candidates are not only able to identify the main ideas and supporting details of oral messages, but also to infer the meaning of unfamiliar words from their contexts, interpret oral messages on a number of levels, analyze them from multiple perspectives, and give detailed personal interpretations that are supported by a rich range of cultural knowledge and understanding. Finally, they demonstrate the ability to think critically about oral messages and to evaluate them in relation to logical and stylistic standards and social relationships, as well as the speaker's purposes, assumptions, and intended audience.

5.1 Literal Comprehension of Spoken Communication

- a. Demonstrate an understanding of the main ideas and significant details of oral messages in a variety of authentic contexts. For example:
 - ◆ Understand the main point of an oral message.
 - ◆ Identify the sequence of steps described in a set of spoken directions.
 - ◆ Recognize a stated cause or effect in a situation described in an oral message.
 - ◆ Choose or provide an appropriate response to a spoken question or comment.
 - ◆ Respond appropriately to a request for information.

5.2 Inferential and Interpretive Comprehension of Spoken Communication

- a. Make deductive and inductive inferences based on information contained in oral messages. For example:
 - ◆ Draw conclusions based on information presented in oral messages.
 - ◆ Characterize the tone or mood of one or more speakers.
 - ◆ Infer the social relationships among speakers (e.g., gender, age, social status).
 - ◆ Analyze a personal relationship implied but not stated in an oral communication.
 - ◆ Interpret the cultural context of spoken communications.

5.3 Critical Analysis of Spoken Communication

- a. Analyze and evaluate oral messages in relation to their purpose, context, and point of view. For example:
 - ◆ Analyze a speaker's assumptions or point of view.
 - ◆ Analyze the historical, social, or cultural context of an oral message.
 - ◆ Evaluate the sufficiency and reliability of evidence presented in support of statements made in oral messages.
 - ◆ Evaluate the social and cultural appropriateness of the language used in oral messages.
 - ◆ Analyze the communicative and discourse strategies employed in oral messages.

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.a.)

Domain 6. Language and Communication: Reading Comprehension

Candidates demonstrate proficiency in the comprehension of written texts in the individual target language as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). For individual target languages, candidates may be asked to demonstrate all or some of the following knowledge and skills. Candidates demonstrate the ability to read effectively and understand written texts in the target language for multiple purposes in different contexts, including a variety of text types, and to accurately comprehend ideas and vocabulary across a range of content, including art, literature, politics, society, and current events, as well as everyday communications and interactions. They demonstrate the ability to comprehend and interpret a variety of texts written in the target language, including expository prose, personal essays, newspaper and magazine articles, narratives and descriptions, correspondence, Web sites, electronic messages, and realia (e.g., signs, flyers, menus). Candidates interpret written texts on a number of levels, analyzing them from multiple perspectives, synthesizing concepts and ideas, and giving detailed personal interpretations that are supported by a rich range of cultural knowledge and understanding. Finally, they demonstrate the ability to think critically about what they read and to evaluate written texts in relation to logical and stylistic standards and social relationships, as well as the author's purposes, assumptions, and intended audience.

6.1 Literal Comprehension of Written Texts

- a. Demonstrate an understanding of the main ideas and significant details of written texts. For example:
 - ◆ Demonstrate an understanding of the main idea or compose an accurate summary of a written text.
 - ◆ Recognize supporting evidence for an argument made in a passage.
 - ◆ Analyze a passage to determine a causal or temporal sequence of events.

6.2 Inferential and Interpretive Comprehension of Written Texts

- a. Make deductive and inductive inferences based on information contained in written texts. For example:
 - ◆ Make inferences about purpose and audience from information provided in a passage.
 - ◆ Identify a writer's intent, assumptions, or point of view.
 - ◆ Recognize implied cause-and-effect relationships in a passage.
 - ◆ Interpret figurative language (e.g., metaphors, similes) in a passage.
 - ◆ Draw conclusions from information presented in a passage.
 - ◆ Analyze a passage to determine assumptions that are implied, but not explicitly stated, in the passage.

6.3 Critical Analysis of Written Texts

- a. Apply critical reasoning skills to written texts. For example:
 - ◆ Analyze the historical, social, and cultural contexts of written texts.
 - ◆ Analyze relationships among ideas in written texts.
 - ◆ Distinguish between fact and opinion in written texts.
 - ◆ Assess the sufficiency and reliability of evidence presented in support of statements made in written texts.
 - ◆ Recognize fallacies in the logic of a writer's argument.
 - ◆ Assess the credibility, objectivity, or bias of material contained in written texts.

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.a.)

Domain 7. Language and Communication: Oral Expression

Candidates demonstrate proficiency in oral expression in the individual target language as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). For individual target languages, candidates may be asked to demonstrate all or some of the following knowledge and skills. Candidates demonstrate the ability to speak effectively in everyday situations and to react competently when asked to respond orally to a complication or an unexpected turn of events. They speak with good pronunciation and intonation and with sufficient accuracy to participate effectively in most formal and informal conversations on practical, social, professional, and abstract topics and are able to narrate and describe in major time frames, providing detailed accounts and exhibiting good control of aspect. Candidates demonstrate the ability to speak effectively in the target language for various purposes in different contexts, employing a variety of text types and accurately expressing ideas in culturally appropriate language across a range of content, including art, literature, politics, society, and current events, as well as everyday communications and interactions. Finally, they are able to deliver oral presentations on a wide range of topics, employing strategies and vocabulary tailored to the speaking situation, and present narrations and descriptions that relate relevant and supporting facts in extended and cohesive discourse.

7.1 Speaking in the Target Language for a Variety of Purposes in Authentic Contexts

- a. Construct connected oral discourse that communicates a message effectively, demonstrating a wide range of vocabulary, idiomatic expressions, and linguistic structures. For example:
 - ◆ Speak appropriately within the context of everyday situations (e.g., school, work, shopping).
 - ◆ Respond to a variety of unexpected situations (e.g., misplaced luggage at an airport) by explaining or describing events or by requesting assistance.
 - ◆ Formulate and defend a hypothesis in response to a given situation.
 - ◆ Narrate or describe a personal experience.
 - ◆ Deliver oral presentations on a wide variety of topics to diverse audiences.
 - ◆ Talk formally and informally about topics of current public and personal interest, demonstrating an ability to use different registers and styles of speech in appropriate contexts.
 - ◆ Discuss the advantages and disadvantages of an idea or a proposed course of action.
 - ◆ Take a position on an issue and support it with persuasive evidence.
 - ◆ Demonstrate the ability to speak effectively on abstract topics and themes.

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.a.)

Domain 8. Language and Communication: Written Expression

Candidates demonstrate proficiency in written communication in the individual target language as described in the American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers (2002) and reflected in the Foreign Language Framework for California Public Schools, Kindergarten through Grade Twelve (2003). For individual target languages, candidates may be asked to demonstrate all or some of the following knowledge and skills. Candidates write in major time frames, employ vocabulary appropriate to purpose and audience, and use a variety of different syntactic structures. When writing texts of several paragraphs in length, they demonstrate competence in the use of a variety of cohesive devices and discourse strategies. Candidates demonstrate the ability to write effectively in the target language for various purposes in different contexts, employing a variety of text types, and to accurately express ideas in culturally appropriate language and vocabulary across a range of content, including art, literature, politics, society, and current events, as well as everyday communications and interactions. Finally, they demonstrate the ability to express themselves through formal and informal writings on practical, social, and professional topics and to write about issues and events of public and personal relevance through extended written texts.

8.1 Writing in the Target Language for a Variety of Purposes in Authentic Contexts

- a. Compose a well-organized passage in the target language, employing styles and levels of diction appropriate for a given audience, purpose, and occasion and demonstrating command of a wide range of vocabulary, idiomatic expressions, and linguistic structures. For example:
 - ◆ Demonstrate the ability to compose written texts in appropriate orthography and writing systems.
 - ◆ Compose personal correspondence.
 - ◆ Compose formal correspondence for a variety of purposes and audiences.

- ◆ Write cohesive summaries of a variety of extended written texts (e.g., a newspaper article, an excerpt from a textbook).
- ◆ Write extended narratives and detailed descriptive accounts of events.
- ◆ Formulate and defend a hypothesis in response to a given situation.
- ◆ Describe the reasoning behind a personal or professional decision.
- ◆ Discuss the advantages and disadvantages of an idea or a proposed course of action.
- ◆ Take a position on an issue and support it with persuasive evidence.
- ◆ Demonstrate the ability to write effectively on abstract topics and themes.

(American Council on the Teaching of Foreign Languages (ACTFL): Program Standards for the Preparation of Foreign Language Teachers, 1.a.)

Music Subject Matter Requirements

Part I: Content Domains for Subject Matter Understanding and Skill in Music

Domain 1. Artistic Perception

Candidates demonstrate an advanced understanding of the facets of artistic perception contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They possess highly developed aural musicianship and aural analysis skills and have acquired advanced knowledge of written music theory and analysis.

1.1 Aural Musicianship

- a. Recognize errors in solo and ensemble performances (e.g., melodic, rhythmic, harmonic, intonation, dynamic, interpretational).
- b. Transcribe aurally presented musical excerpts into melodic, harmonic, and rhythmic notation.
- c. Analyze and describe the form, style, and expressive elements of a musical example.
- d. Recognize and describe cultural elements from diverse historical periods, genres, and styles of Western and non-Western music.
- e. Analyze and describe the use of musical elements in a given work (e.g., melody, harmony, rhythm, texture) that make it unique, interesting, and expressive.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 1: 1.2, Grade 2: 1.3–1.4, Grade 3: 1.3 and 1.6, Grade 4: 1.4 and 1.6, Grade 5: 1.4–1.6, Grade 6: 1.3 and 1.5–1.6, Grade 7: 1.3 and 1.5–1.6, Grade 8: 1.3 and 1.5–1.7, Grades 9 through 12–Proficient: 1.2 and 1.4–1.6, and Grades 9 through 12–Advanced: 1.2 and 1.4–1.6. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard II.)

1.2 Written Theory and Analysis of Western Music

- a. Demonstrate the ability to read and notate music (e.g., use of notation in various clefs; key and time signatures; scales and melodic elements; intervals, triads, and chords; figured bass; rhythm, meter, and tempo; dynamic and expressive symbols; music terminology).
- b. Demonstrate the ability to read a full instrumental and/or choral score and describe how the elements of music (e.g., doublings, melody and accompaniment, transpositions, orchestration) are used.
- c. Analyze and identify the form, style, compositional devices, harmonic progressions, and cadences in a score excerpt.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 1: 1.1–1.2, Grade 2: 1.1–1.4, Grade 3: 1.1–1.2 and 1.6, Grade 4: 1.1–1.4 and 1.6, Grade 5: 1.1–1.3 and 1.6, Grade 6: 1.1–1.2 and 1.5–1.6, Grade 7: 1.1–1.2 and 1.5–1.6, Grade 8: 1.1–1.2 and 1.5–1.6, Grades 9 through 12–Proficient: 1.1 and 1.6, and Grades 9 through 12–Advanced: 1.1 and 1.5–1.6. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard I.)

Domain 2. Creative Expression

Candidates demonstrate an advanced understanding of the facets of creative expression contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They perform expressively and skillfully on a primary instrument or with voice. To meet the needs of the general music classroom and ensemble rehearsals, they also play the keyboard proficiently. Candidates have a thorough knowledge of conducting techniques, and they demonstrate that they can conduct choral and instrumental ensembles expressively and skillfully. They are also skilled at sight-singing, sight-reading, composing, arranging, and improvising music for classroom and performance situations.

2.1 Instrumental and Vocal Proficiency

- a. Demonstrate competence on a primary instrument or with voice by performing individually and in ensembles with appropriate expression and good musicianship skills (e.g., technical accuracy, tone quality, intonation, articulation).
- b. Demonstrate sight-singing and sight-reading skills.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Kindergarten: 2.1–2.3, Grade 1: 2.1–2.3, Grade 2: 2.1–2.3, Grade 3: 2.1–2.3, Grade 4: 1.2–1.3 and 2.1–2.2, Grade 5: 1.1–1.3 and 2.1–2.2, Grade 6: 1.1–1.2, 1.4, and 2.1–2.3, Grade 7: 1.1–1.2, 1.4, and 2.1–2.3, Grade 8: 1.1–1.2, 1.4, and 2.1–2.3, Grades 9 through 12–Proficient: 1.3 and 2.1–2.5, and Grades 9 through 12–Advanced: 1.3 and 2.1–2.5. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard II.)

2.2 Functional Keyboard Skills

- a. Demonstrate functional keyboard proficiency.
- b. Demonstrate sight-reading proficiency.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 1: 2.3, Grade 4: 1.2–1.3 and 2.2, Grade 5: 1.1–1.3 and 2.2, Grade 6: 1.1–1.2, 1.4, and 2.3, Grade 7: 1.1–1.2, 1.4, and 2.3, Grade 8: 1.1–1.2, 1.4, and 2.3, Grades 9 through 12–Proficient: 1.3 and 2.4, and Grades 9 through 12–Advanced: 1.3 and 2.4. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard II.)

2.3 Conducting

- a. Understand and demonstrate basic conducting patterns.
- b. Understand and demonstrate cuing techniques.
- c. Understand and demonstrate techniques for conducting expressively.
- d. Interpret and analyze a choral or instrumental score (e.g., identifying potential performance issues).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 6: 2.1 and 2.3, Grade 7: 2.1 and 2.3, Grade 8: 2.1 and 2.3, Grades 9 through 12–Proficient: 1.1, 1.4, 2.1, and 2.3–2.5, and Grades 9 through 12–Advanced: 1.1, 2.1, and 2.3–2.5. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard II.)

2.4 Composing and Arranging

- a. Recognize and understand compositional techniques and textures (e.g., counterpoint, ostinato, melody and countermelody, tone row).
- b. Understand and demonstrate how to arrange music (e.g., scoring techniques, transpositions, ranges) for voices and/or various acoustic or digital/electronic instruments.
- c. Understand and demonstrate how to harmonize a given melody.
- d. Understand and demonstrate, given specific parameters, how to create a melodic and/or rhythmic composition.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Kindergarten: 2.4, Grade 3: 2.4, Grade 4: 2.3, Grade 5: 2.3, Grade 6: 2.4–2.5, Grade 7: 2.4–2.5, Grade 8: 2.4–2.5, Grades 9 through 12–Proficient: 2.6–2.8, and Grades 9 through 12–Advanced: 2.6–2.7.)

2.5 Improvising

- a. Understand and demonstrate how to create melodic and rhythmic improvisations.
- b. Understand and demonstrate techniques for improvising an accompaniment on keyboard.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 1: 2.4, Grade 2: 2.4, Grade 4: 2.3, Grade 5: 2.3, Grade 6: 2.6, Grade 7: 2.6–2.7, Grade 8: 2.6–2.7, Grades 9 through 12–Proficient: 2.9–2.10, and Grades 9 through 12–Advanced: 2.8. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standard II.)

Domain 3. Historical and Cultural Foundations

Candidates demonstrate an advanced understanding of the historical and cultural foundations of music contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They demonstrate wide knowledge of music from around the world, the history of Western music, and the history of music in the United States and California. They use this knowledge when analyzing musical works for various purposes.

3.1 Music History and Cultural Context

- a. Identify and describe stylistic differences (e.g., genres, media, social functions) in music from various cultures and historical periods.
- b. Analyze musical works from various cultures and historical periods in terms of their form or genre, organizational principles, historical and cultural context, use of the elements of music, use of expressive devices, and any unique features they possess.
- c. Understand the roles of musicians and composers in diverse cultures and historical periods.
- d. Identify the influences of diverse cultural and ethnic groups on music in California and the United States.
- e. Demonstrate knowledge of instruments from a variety of cultures and historical periods.

- f. Explain how music from various cultures and historical periods reflects social functions, changing ideas, and cultural values.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Kindergarten: 3.1–3.4 and 4.2, Grade 1: 3.1–3.4, Grade 2: 3.1–3.3, Grade 3: 3.1–3.4, Grade 4: 1.5 and 3.1–3.5, Grade 5: 3.1–3.5, Grade 6: 1.5 and 3.1–3.5, Grade 7: 1.5 and 3.1–3.6, Grade 8: 1.5, 3.1–3.6, and 4.3–4.4, Grades 9 through 12–Proficient: 1.6, 3.1–3.3, and 4.3–4.4, and Grades 9 through 12–Advanced: 1.6, 3.1–3.3, 3.5–3.8, and 4.2–4.3. National Board for Professional Teaching Standards [NBPTS] Music Standards: Standard II.)

Domain 4. Aesthetic Valuing

Candidates demonstrate an advanced understanding of aesthetic valuing in music as contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They are able to respond to, analyze, and critique performances and works of music, including their own.

4.1 Critical Evaluation

- a. Know and apply criteria for evaluating the quality and effectiveness of musical performances, compositions, and arrangements.
- b. Evaluate a performance, composition, arrangement, or improvisation by comparing it with an exemplary model.
- c. Know and apply criteria for evaluating and assessing the quality and effectiveness of one's own musical performance.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 2: 4.1, Grade 3: 4.1 and 4.3, Grade 4: 4.1, Grade 5: 4.2, Grade 6: 3.5 and 4.1–4.3, Grade 7: 4.1–4.3, Grade 8: 4.1–4.4, Grades 9 through 12–Proficient: 4.1–4.4, and Grades 9 through 12–Advanced: 4.1–4.3.)

Domain 5. Connections, Relationships, and Applications

Candidates demonstrate an advanced understanding of music connections, relationships, and applications contained in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They understand the connections and relationships between music and the other arts as well as between music and other academic disciplines. Candidates are also familiar with the broad range of career and lifelong learning opportunities available in the field of music as well as the ways in which music functions in the media and entertainment industries.

5.1 Connections and Relationships

- a. Recognize and describe ways of integrating arts disciplines.
- b. Understand how elements, artistic processes, and organizational principles are used in similar and distinctive ways in the various arts.
- c. Identify similarities and differences in the meanings of common terms used in various arts and other subject areas.

- d. Identify and explain ways in which the principles and subject matter of music and various disciplines outside the arts are interrelated (e.g., acoustics).

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Kindergarten: 5.1, Grade 2: 5.1, Grade 3: 5.1, Grade 4: 5.1–5.3, Grade 6: 5.1, Grade 7: 5.1, Grade 8: 5.1, Grades 9 through 12–Proficient: 5.1, and Grades 9 through 12–Advanced: 5.1–5.2.)

5.2 Career Applications and Functions of Music

- a. Identify a variety of careers and avocations in the field of music.
- b. Explain ways in which music functions in the media and entertainment industries (e.g., radio, television, Internet, advertising, film, video, theatre).
- c. Know and apply current research to support the inclusion of music in the school curriculum.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Kindergarten: 5.2, Grade 2: 5.2, Grade 3: 5.2, Grade 5: 5.1–5.2, Grade 6: 5.2, Grade 7: 5.2–5.3, Grade 8: 5.2–5.3, Grades 9 through 12–Advanced: 4.1 and 5.2–5.3, and Grades 9 through 12–Proficient: 5.2–5.3.)

Domain 6. Music Methodology and Repertoire

Candidates demonstrate an advanced understanding of music methodology and repertoire for listening and performance that reflects the content in the Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music (2001). Candidates have both broad and deep conceptual knowledge of the subject matter. They have in-depth knowledge of methodology of general music as well as instrumental and choral performance ensembles. Candidates are familiar with a broad range of repertoire, and they apply criteria to evaluate pieces of music for specific purposes. Candidates are familiar with the broad range of technology used in creating, listening to, and studying music. They are also knowledgeable about strategies for sequencing music activities and about specialized music evaluation tools.

6.1 Music Methodology

- a. Demonstrate knowledge of techniques for developing aural perception skills and for developing the ability to read and interpret music.
- b. Demonstrate basic knowledge of various music learning approaches and methodologies (e.g., Orff Schulwerk, Kodály, Dalcroze, Suzuki, and Gordon Music Learning Theory).
- c. Demonstrate knowledge of basic instrumental techniques.
- d. Demonstrate knowledge of basic vocal/choral techniques.
- e. Demonstrate basic knowledge of solfège methodologies.
- f. Demonstrate functional knowledge and skills in voice, keyboard, woodwinds, brass, strings, guitar, and percussion.
- g. Demonstrate knowledge of ensemble rehearsal techniques.
- h. Demonstrate knowledge of the effects of peer instruction, collaborative learning groups, lectures, demonstrations, and discussions of musical performances on music learning.
- i. Identify strategies for sequencing music activities and understand how music activities relate to student content standards.
- j. Demonstrate knowledge of specialized music evaluation tools such as pencil-and-paper critiques, videotaping, audiotaping, portfolios, adjudication forms, and rubrics.

- k. Demonstrate an understanding of the developmental stages of learning (i.e., knowledge of the cognitive, physical, and social development of students) in relation to music.
- l. Recognize uses of technology as a tool in creating, listening to, and studying music (e.g., CD-ROM, DVD, computers, Internet, synthesizers, MIDI, other digital/electronic technology).
- m. Understand strategies for facilitating equity, access, accommodation, and adaptation in learning music.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: All grade levels: Standards 1–5. National Board for Professional Teaching Standards [NBPTS] Music Standards: Standard III.)

6.2 Repertoire and Literature for Listening, Performance, and Study

- a. Know and apply criteria and background knowledge for selection of appropriate music repertoire and literature from diverse cultures and historical periods for various developmental levels and applications in school and community settings.
- b. Demonstrate familiarity with historical and contemporary works from various musical traditions and diverse cultures.
- c. Demonstrate familiarity with sequential, developmental, and cultural factors used in selecting music literature for performance.
- d. Know and apply criteria for selection of music repertoire and literature to make connections and enhance relationships with other curricular areas.
- e. Know copyright laws and legal consequences as they apply to the school music program.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: Grade 4: 2.1–2.2, Grade 5: 2.1–2.2, Grade 6: 2.1 and 2.3, Grade 7: 2.1 and 2.3, Grade 8: 2.1 and 2.3, Grades 9 through 12–Proficient: 2.1, 2.4, and 3.4–3.5, and Grades 9 through 12–Advanced: 2.1, 2.4, and 3.4. National Board for Professional Teaching Standards [NBPTS] Music Standards: Standard IV.)

Part II: Subject Matter Skills and Abilities Applicable to the Content Domains in Music

Candidates for Single Subject Teaching Credentials in music are accomplished musicians with excellent musicianship skills and a thorough understanding of musical content knowledge. They demonstrate functional keyboarding skills and perform proficiently on a primary instrument or with voice, and they are able to demonstrate these skills effectively in the classroom to inspire and instruct their students. They apply their comprehensive knowledge of music theory, music history, and cultural context to analyze musical works. They use this information to conduct and produce technically accurate and musically expressive instrumental and choral performances. Using their knowledge of aesthetics, they develop and apply criteria for critiquing performances and compositions.

As prospective music teachers, candidates are knowledgeable about various methodologies for providing developmentally appropriate sequential instruction in general music and performance classes. Candidates have a thorough knowledge of the California State Content Standards for music, and they incorporate these standards into instruction. They know how to incorporate technology into instruction, and they connect instruction in music with other arts and academic disciplines. They are also familiar with a wide range of repertoire for listening and performance, and they incorporate into instruction pieces of music from a wide range of historical periods, styles, and cultures. They know techniques for developing singing skills and techniques for playing a variety of instruments and can transfer this information to their students. Candidates are also well versed in a variety of techniques for planning and assessing learning in general music and performance classes, and they are able to adapt instruction to meet the needs of all students in their classes. Being familiar with various careers available in the field of music, they are able to inform students about and encourage students to investigate opportunities for pursuing a career in music.

(Visual and Performing Arts Content Standards for California Public Schools Prekindergarten Through Grade Twelve: Music: All grade levels: Standards 1–5. Music Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs: Standards III and IV. National Board for Professional Teaching Standards [NBPTS] Music Standards: Standard II.)

Physical Education Subject Matter Requirements

Part I: Content Domains for Subject Matter Understanding and Skill in Physical Education

Domain 1. Professional Foundations

Candidates demonstrate an understanding of the philosophical, historical, and legal/ethical foundations of physical education. To plan and implement programs that are aligned with the approved Physical Education Framework or other approved state documents and the Challenge Standards for Student Success: Physical Education (1998), candidates must have a broad and deep understanding of issues that affect the field, of the professional responsibilities of physical educators, and of the past and present philosophies of physical education and their impact on contemporary programs.

1.1 Philosophies of Physical Education

- a. Demonstrate knowledge of past and present philosophies of physical education and their impact on the goals, scope, and components of physical education programs.
- b. Demonstrate an understanding of the organization, purposes, and goals of contemporary physical education programs.

1.2 Historical Development

Demonstrate knowledge of the historical development of physical education, including contributions of noteworthy physical educators of various backgrounds, races, ethnicities, genders, and national origins.

1.3 Current Research, Trends, and Issues

Analyze current research, trends, and issues that affect physical education (e.g., inclusion, lifelong fitness, the sharp increase in obesity-related diseases among U.S. youth) and their impact on physical education programs and goals.

1.4 Legal and Ethical Issues

Demonstrate an understanding of legal and ethical issues in physical education, such as those related to supervision, liability, confidentiality, equity, disability, and diversity.

1.5 Interrelationships of the Subdisciplines of Kinesiology

Demonstrate an understanding of the interrelationships of the subdisciplines of kinesiology.

1.6 Professional Responsibilities, Organizations, and Resources

- a. Demonstrate knowledge of professional responsibilities, organizations, and resources that support physical education (e.g., AAHPERD, American College of Sports Medicine, National Council for the Exceptional Individual).
- b. Demonstrate knowledge of current state and national standards for physical education.

1.7 Relationship Between Human Movement Activities and Values

- a. Demonstrate an understanding of human movement activities as instruments for maintaining traditional values and/or for examining and changing traditional values.
- b. Analyze the role of physical education in promoting equity for diverse groups.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 7. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 4, 7, 8, and 9.)

Domain 2. Growth, Motor Development, and Motor Learning

Candidates must demonstrate an understanding of human growth and development processes, as well as how these processes interact with and influence motor learning, in order to teach the movement knowledge and skills contained in the Challenge Standards for Student Success: Physical Education (1998). Foundational knowledge of physical growth, motor development, and motor learning helps ensure that candidates are prepared to provide students, including students with disabilities, with an appropriate, safe, and effective physical education program.

2.1 Individual Differences

- a. Demonstrate knowledge of individual motor and physical fitness variables such as agility, balance, flexibility, coordination, strength, and speed.
- b. Analyze individual physical changes and their impact on mechanical and physiological aspects of motor performance.

2.2 Perceptual-Motor Development

Know components of perceptual-motor development such as visual, auditory, tactile, and kinesthetic discrimination and how they relate to skill acquisition and performance.

2.3 Physical and Developmental Changes

Demonstrate an understanding of physical changes that occur with growth, development, and age, and analyze their impact on mechanical and physiological aspects of motor performance.

2.4 Motor Learning

Relate classical and current theories and models of motor learning to fundamental concepts underlying skill acquisition such as transfer, feedback, retention, practice, readiness, and observational learning.

2.5 Motor Task Analysis

Apply knowledge of motor task analysis as it relates to motor development, enabling students to select or design motor tasks that are appropriate to the process of learning movement skills.

2.6 Conditions Affecting Growth, Motor Development, and Motor Learning

Analyze conditions that affect growth, motor development, and motor learning such as diseases, disabilities, and social, emotional, and environmental factors.

2.7 Developmental Differences Affecting Motor Skills Acquisition

Demonstrate an understanding of developmental differences in motor learning and factors that affect motor skills acquisition for individuals with disabilities.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1 and 2. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standard 2.)

Domain 3. The Science of Human Movement

Candidates demonstrate an understanding of the scientific bases of human movement. To guide students in meeting the goals identified in the Challenge Standards for Student Success: Physical Education (1998), candidates must be able to analyze motion according to scientific principles and apply that knowledge with consideration for individual differences, including disabilities. A broad and deep understanding of the sciences involved in human movement, including anatomy, physiology, kinesiology/biomechanics, exercise physiology, and health-related fitness, enables candidates to understand and explain motion; recognize changes in body systems resulting from practice, development, and response to exercise; and provide instruction in safe and efficient body mechanics.

3.1 Body Systems

Demonstrate knowledge of the skeletal system, the general organization of the nervous system, the actions of muscles and major muscle groups, and the interaction of these systems with one another and with the external environment in producing motion.

3.2 Basic Kinematic and Kinetic Principles of Motion

Apply knowledge of basic kinematic and kinetic principles of motion including, but not limited to, summation of forces of equilibrium, vectors, and force-velocity relationships.

3.3 Biomechanical Principles

- a. Apply knowledge of biomechanical principles (e.g., Newton's laws of motion, center of gravity) to a broad range of movement activities.
- b. Apply knowledge of biomechanical principles in relation to individual differences and to body mechanics for safe and efficient movement/motion.

3.4 Movement Analysis

Apply knowledge of movement analysis to movement patterns, including technologies for movement analysis.

3.5 Effects of Exercise

Demonstrate knowledge of acute and chronic effects of exercise on body systems (e.g., pulmonary, cardiorespiratory, muscular, skeletal, neural, endocrine) and on energy systems utilized during exercise.

3.6 Components of Wellness

- a. Demonstrate an understanding of components of wellness, such as nutrition, stress management, cardiorespiratory risk reduction, and physical fitness (i.e., cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition).
- b. Analyze the effects of factors such as gender, age, disability, environment, and substance abuse on physical fitness.

3.7 Physical Fitness Testing and Prescription

Demonstrate knowledge of physical fitness testing, exercise prescription, and fitness programs for all individuals, including those with disabilities, as well as the components of health-related fitness and technologies for fitness testing and training.

3.8 Factors Affecting Physical Performance

Analyze the effects of factors such as gender, age, disability, environment, and substance abuse on physical performance.

3.9 Safety, Injury Prevention, and First Aid

Demonstrate an understanding of safety-related topics such as the prevention and care of injuries, cardiopulmonary resuscitation, and first aid.

3.10 Physiological Principles of Fitness

Apply knowledge of physiological principles (e.g., overload, specificity, FIT, reversibility) to the components of physical fitness.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 4. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 3, 5, and 10.)

Domain 4. The Sociology and Psychology of Human Movement

Candidates demonstrate an understanding of the sociology and psychology of human movement. Physical activity provides a context for a broad range of experiences that can be used to promote the personal and social developmental concepts and skills contained in the Challenge Standards for Student Success: Physical Education (1998). A broad and deep understanding of the sociological and psychological aspects of movement activities helps ensure that candidates are prepared to promote students' motivation for physical activity, regardless of students' abilities, and their development of positive, responsible personal and social behaviors that encourage lifelong physical activity.

4.1 Personal Development

Analyze the relationship of movement to the development of individual identity, including the development of self-awareness, self-concept, self-discipline, self-expression, and body image.

4.2 Theories Related to Motivation

Demonstrate an understanding of contemporary theories such as attribution, social learning, competence, learned helplessness, self-efficacy, and other social/psychological theories as they relate to motivation in physical activities.

4.3 Social Development

- a. Analyze the relationship of movement to social interaction and the development of group member identity through physical education activities.
- b. Identify strategies and activities for promoting appropriate skills and behaviors for cooperation, competition, problem solving, trust building, and risk taking.

4.4 Role of Movement Activities in Society

- a. Demonstrate knowledge of the role of movement activities in society and the relationship of movement activities to social norms, ethics, values, and institutions.
- b. Demonstrate knowledge of the role of movement activities in the development of social interaction skills, a sense of group identity, and a sense of productive participation with others.
- c. Demonstrate knowledge of the role of movement activities in promoting positive social behaviors and traits (e.g., loyalty; compassion; fairness; understanding and appreciation of similarities, differences, and abilities).

4.5 Factors Influencing Activity Choices

Analyze factors that influence an individual's activity choices (e.g., gender, age, ethnicity, culture, disability).

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 4, 5, and 6. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 4 and 8.)

Domain 5. Movement Concepts and Forms

Candidates demonstrate an understanding of the movement concepts and forms contained in the Challenge Standards for Student Success: Physical Education (1998). These include but are not limited to aquatics; dance; fitness activities; fundamental and creative movement skills; individual, dual, and team sports; nontraditional activities and games; outdoor education activities; and gymnastics. To develop a balanced program that will address a variety of ability levels and create challenging, appropriate tasks in a variety of movement forms, candidates must have a broad and deep understanding of movement and fitness activities as well as an ability to integrate and apply movement concepts to a broad range of physical education activities and environments.

5.1 Fundamental and Creative Movement Skills

- a. Demonstrate knowledge of fundamental movement skills such as basic locomotor and non-locomotor skills, movement patterns, manipulative skills, and basic rhythmic movement, as well as knowledge of elements and qualities of movement (e.g., space, time, force, flow, level).
- b. Demonstrate knowledge of creative movement such as exploration, improvisation, and problem solving.

5.2 Dance Concepts and Forms

- a. Demonstrate knowledge of skills used in rhythmic activities, creative dance, and structured dance forms (e.g., modern, ballet, jazz, tap, social, folk, country, ethnic, classical).
- b. Demonstrate an understanding of the use of dance to express perceptions, feelings, images, and thoughts.
- c. Demonstrate an understanding of dance concepts, forms, and basic vocabulary.

5.3 Gymnastic Movements

- a. Demonstrate knowledge of gymnastic forms such as rhythmic gymnastics and educational gymnastics.
- b. Demonstrate knowledge of gymnastic movements such as stunts, tumbling, apparatus work, and floor exercise.

5.4 Aquatic Skills

Demonstrate knowledge of aquatic skills such as water safety, swimming strokes, diving, and water fitness activities and games.

5.5 Individual, Dual, and Team Sports and Games

- a. Demonstrate knowledge of techniques, skills, critical elements, scientific principles, and equipment for individual, dual, and team sports and games.
- b. Apply knowledge of developmental progressions for sports activities.
- c. Demonstrate an understanding of principles of game strategies.
- d. Demonstrate knowledge of safety, etiquette, fair play, and fair competition.
- e. Apply knowledge of how to promote critical-thinking, decision-making, problem-solving, collaboration, communication, leadership, conflict-resolution, and teamwork skills through participation in sports and games.
- f. Demonstrate knowledge of the application of motor learning principles (e.g., transfer, game-like conditions) in instruction for sports and games.

5.6 Outdoor Education

- a. Demonstrate knowledge of techniques, skills, and safety issues for outdoor education activities.
- b. Identify long-term psychological, physiological, and lifestyle benefits of participation in outdoor education activities.

5.7 Nontraditional and Cooperative Activities

- a. Identify examples of nontraditional, global, and cooperative games and activities (e.g., Pickle ball, bocce ball, team juggling).
- b. Apply knowledge of how to promote critical thinking, decision making, problem solving, collaboration, cooperation, leadership, and communication through participation in non-traditional and cooperative activities.

5.8 Combative Activities

Demonstrate knowledge of one or more basic combative activities (e.g., fencing, wrestling, self-defense) and related safety issues.

5.9 Fitness Activities

Demonstrate an understanding of fitness activities such as aerobic conditioning, resistance and weight training, and stretching that increase cardiovascular efficiency, muscular strength and endurance, and flexibility.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 4. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standard 5.)

Domain 6. Assessment and Evaluation Principles

Candidates must demonstrate an understanding of assessment principles and procedures in order to be able to evaluate the effectiveness of physical education strategies and activities in promoting student achievement of the goals presented in the Challenge Standards for Student Success: Physical Education (1998). A rigorous knowledge of assessment helps ensure that candidates can determine whether individuals, including those with diverse backgrounds, varying abilities, and special needs, have progressed and achieved specified goals in physical education. Candidates must be able to select, adapt, and develop appropriate assessment instruments and strategies based on sound research principles related to physical, motor, and fitness attributes and needs of individuals and classes.

6.1 Evaluation Methods in Physical Education

Demonstrate knowledge of evaluation methods used for the various domains of learning in physical education (e.g., physical, psychomotor, cognitive, social, affective).

6.2 Techniques of Test Construction, Evaluation, and Administration

Demonstrate knowledge of basic strategies of test construction, evaluation, and administration for traditional, holistic, and authentic assessments such as developing and using criteria to assess attainment of goals and objectives.

6.3 Test Characteristics

Apply knowledge of test characteristics such as validity, reliability, and objectivity.

6.4 Assessment Techniques and Tools

Apply knowledge of assessment strategies and instruments, including technology, that are appropriate for individuals with diverse backgrounds, special needs, and disabilities.

6.5 Types of Evaluation

- a. Demonstrate an understanding of types of evaluation such as norm-referenced, criterion-referenced, content-referenced, and authentic assessment.
- b. Demonstrate knowledge of formative and summative evaluation strategies.

6.6 Basic Statistical Applications

Demonstrate knowledge of basic statistical applications, including central tendency and variability, standard scores, norms, and correlations.

6.7 Interpretation and Communication of Assessment Data

Apply skills for interpreting assessment data and for communicating test results, performance profiles, and assessment data to various audiences (e.g., students, parents, school board members).

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, and 5. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 6, 10, and 11.)

Domain 7. Integration of Concepts

Candidates must demonstrate an understanding of the integration of themes and concepts in physical education and the interrelationships between physical education and other subject areas in order to create effective learning environments and experiences that provide students with opportunities to achieve the goals contained in the Challenge Standards for Student Success: Physical Education (1998).

7.1 Interpretation and Application of the Subdisciplines of Kinesiology

Interpret and apply knowledge of the subdisciplines of kinesiology to facilitate student skill acquisition and performance.

7.2 Selecting, Adapting, and Modifying Activities

Use developmental information to appropriately select, adapt, and modify sports and games based on goals, skill levels, individual needs, and disabilities.

7.3 Developmental Progressions

Demonstrate knowledge of appropriate developmental progressions within and between individual movement skills.

7.4 Learning Concepts and Principles

Use concepts and principles of learning to analyze observed individual differences.

7.5 Connections Between Physical Education and Other Disciplines

Demonstrate knowledge of connections between physical education and other subject areas such as life and physical sciences, social science, health, mathematics, language arts, and visual and performing arts.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 2, 3, 4, 6, and 7. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 5, 7, 9, 10, and 11.)

Part II: Subject Matter Skills and Abilities

Applicable to the Content Domains in Physical Education

Candidates apply knowledge of the theoretical and scientific bases of human movement to design, select, and modify physical activities that reflect students' developmental characteristics and individual differences. They draw upon knowledge of the subdisciplines of kinesiology to ensure that students are able to participate safely and effectively in physical education activities designed to develop and enhance their movement skills and movement knowledge.

Candidates understand significant factors and influences in developing, analyzing, and assessing basic motor skills. They know how to structure developmentally appropriate activities to promote maximum participation, inclusion, and active engagement in a wide range of movement forms, including traditional and nontraditional games, sports, dance, and fitness activities. They select and create cooperative and competitive activities that promote trust building, problem solving, collaboration, leadership, and strategic planning. They design fitness programs and recommend exercises and activities that are based on sound physiological and fitness training principles. Candidates understand the short-term and long-term benefits of a healthy, active lifestyle and know how to demonstrate and communicate these benefits to students.

Candidates apply knowledge of the sociological, psychological, philosophical, historical, and cultural dimensions of physical education to select and develop activities and approaches that promote students' development of positive personal and social behaviors, including social interaction and communication skills. They are aware of the role of movement activities in helping participants develop a sense of individual identity and group member identity. Candidates use knowledge of historical and cultural influences on games, sports, dance, and other physical activities to enhance student awareness and appreciation of cultural and artistic diversity, the role of movement in society, and the use of physical activity for enjoyment and self-expression. They recognize the importance of inclusion, fair play, and etiquette, as well as respect and consideration for self and others. Candidates understand that many factors influence an individual's activity choices and carefully evaluate the appropriateness of activities in terms of participants' age and developmental levels, motor proficiency, gender, cultural background, and physical strengths and limitations. Candidates apply knowledge of student development and learning to select activities and approaches that help students experience the benefits of individual challenges and successes, and they use principles of learning and motivation to spark students' interest in physical activity and their desire to engage in lifelong physical activity.

Candidates use their knowledge of assessment principles and procedures to collect, analyze, interpret, and summarize assessment data. They know physical fitness testing principles, technologies, and techniques and are prepared to administer the state-mandated physical fitness assessment. Candidates are able to interpret and communicate test results, performance profiles, and other types of assessment information in a meaningful and sensitive way.

Candidates understand connections among the subdisciplines of kinesiology, as well as connections between physical education and other subject areas and use this understanding to provide learning activities that promote student skill acquisition and performance. Candidates select, adapt, and modify activities based on program goals, individual differences, and individual needs so that all students have an opportunity to develop their understanding and application of movement skills and concepts and to use this knowledge in exploring other academic and life skills areas.

Preliminary Educational Technology Subject Matter Requirements

Content Domains for Subject Matter Understanding and Skill in Preliminary Educational Technology

As computer-based technology becomes increasingly important in contemporary society, students and educators alike must become competent and confident in their ability to use computer-based technological tools. The foundational knowledge and skills needed to integrate computer-based technology effectively into the educational context are contained in the Standards of Quality and Effectiveness for Professional Teacher Preparation Programs (California Commission on Teacher Credentialing, 2001), Program Standard 9. Candidates demonstrate a basic understanding of computer operations and care, as well as an understanding of legal, ethical, privacy, security, and safety issues related to the use of computer-based technology in the classroom. Candidates demonstrate knowledge of the ways in which computer-based technology may enhance productivity. Finally, candidates demonstrate their knowledge of teaching and learning applications of computer-based technology to improve student academic achievement.

Domain 1. Basic Operations, Concepts, and Issues of Computer-Based Technology

1.1 Basic Principles of Computer Hardware and Software Operation and Care

- a. Demonstrate knowledge of kinds and functions of hardware and software.
- b. Demonstrate knowledge of startup and shutdown sequences.
- c. Demonstrate knowledge of methods for using and caring for information storage devices and removable media.
- d. Demonstrate an understanding of how to use and care for input/output devices, including presentation devices, scanners, digital cameras and video recorders, and printers.
- e. Demonstrate knowledge about viruses and methods for virus prevention.
- f. Demonstrate an understanding of how to access files in local and remote locations.
- g. Demonstrate an understanding of how to access files in multiple formats.
- h. Demonstrate an understanding of how to use and manage shared files.
- i. Demonstrate an understanding of network connectivity and logon procedures.

1.2 Basic Troubleshooting for Computers and Related Peripheral Devices

- a. Demonstrate knowledge of basic troubleshooting procedures for identifying hardware, software, and connectivity problems.
- b. Demonstrate an understanding of when to access the appropriate avenue of technical support.
- c. Understand and use appropriate terminology to articulate information relating to hardware, software, and connectivity problems.

1.3 Acceptable Use Policies and Legal and Ethical Issues

- a. Demonstrate knowledge of the scope and jurisdiction of local acceptable use policies (AUPs) and state and federal laws relating to use of computer-based technology.
- b. Demonstrate an understanding of teacher and student rights and responsibilities regarding Internet/intranet and e-mail use as defined in an acceptable use policy.
- c. Demonstrate an understanding of responsibility and liability issues related to violations of intellectual property rights (e.g., software piracy, plagiarism) and infrastructure security (e.g., unauthorized access or modifications to a computer network).
- d. Demonstrate an understanding of responsibility and liability issues related to various electronic media licensing arrangements.
- e. Demonstrate knowledge of the provisions of current copyright laws regarding electronically reproduced and distributed copyrighted materials in the classroom.
- f. Demonstrate the ability to appropriately cite the sources of electronically distributed information.
- g. Demonstrate awareness of best practices regarding computer and network security concerns (e.g., virus scanning, network log on) and shared resource management (e.g., bandwidth, storage space, mobile equipment).

1.4 Privacy, Security, and Safety Issues

- a. Demonstrate an understanding of how to use computer-based technology responsibly with regard to student, guardian, and school staff privacy and security (e.g., Children's Internet Protection Act of 2000).
- b. Demonstrate knowledge of various strategies for protecting students from inappropriate material and interactions in the classroom.
- c. Demonstrate knowledge of the legal requirement for obtaining proper consent in compliance with local policies for electronically producing, publishing, sharing, and distributing student, guardian, and school staff information (e.g., names, photographs, student work).
- d. Demonstrate an understanding of the safety issues related to the use of interactive communication tools (e.g., chat rooms, instant messaging, Webcams).
- e. Demonstrate an understanding of health issues related to the use of computers.

Domain 2. Productivity Applications of Computer-Based Technology

2.1 Managing Records and Information

- a. Demonstrate awareness of data management and data analysis software.
- b. Demonstrate knowledge of spreadsheet and database applications and functions for collecting, sorting, and organizing data (e.g., grades, attendance, assessment records).

2.2 Communicating Through Multiple Forms of Media

- a. Identify and select appropriate application software to create, present, and/or publish a variety of documents (e.g., reports, tests, correspondence, newsletters that incorporate graphics and charts, Web pages).
- b. Demonstrate awareness of the process of creating and editing documents for a Web page.
- c. Demonstrate the ability to create a document utilizing a variety of media components that may include text, Web links, graphics, charts, sound, and video.

2.3 Communicating Using Computer-Based Collaborative Tools

- a. Demonstrate the ability to compose, send, forward, and reply to e-mail messages within and outside the school system.
- b. Demonstrate the ability to use an e-mail system's address book.
- c. Demonstrate the ability to use attachments.
- d. Demonstrate an understanding of ways to organize and archive e-mail messages.
- e. Demonstrate awareness of how to communicate in a variety of online collaborative environments, such as online bulletin boards, newsgroups, group e-mail lists, threaded discussions, online chats, and audio/video conferencing.
- f. Demonstrate an understanding of appropriate online and e-mail etiquette.

2.4 Using Electronic Research Tools and Applying Information Literacy Skills

- a. Demonstrate knowledge of state and national electronic reference sources/databases (e.g., California Learning Resources Network [CLRN], Educational Resources Information Clearinghouse [ERIC]).
- b. Demonstrate awareness of high-quality commercial reference and subscription information sources/databases.
- c. Demonstrate knowledge of methods for searching, accessing, selecting, and retrieving information using the Internet/intranet.
- d. Demonstrate the ability to download, store, and print information.
- e. Assess the authenticity, reliability, and quality of information resources.
- f. Assess the authenticity, reliability, and quality of data collected.
- g. Recognize biases based on gender, race, nationality, ethnicity, religion, age, disability, or cultural, economic, or geographic background.

Domain 3. Teaching and Learning Applications of Computer-Based Technology

3.1 Using Current Best Practices and Research Findings on the Effective Use of Technology to Improve Teaching and Learning

- a. Demonstrate knowledge of how to analyze current research findings on effective uses of computer-based technology in teaching and learning.
- b. Demonstrate knowledge of how to design lessons based on the analysis of current best practices and research findings to improve student achievement.
- c. Demonstrate the ability to make data-driven decisions by using information gathered from multiple sources to guide instruction.
- d. Demonstrate knowledge of strategies for planning learning activities that include a variety of appropriate computer-based technology resources.
- e. Demonstrate knowledge of ways to develop and/or adapt lessons to utilize available technology resources (e.g., single vs. multiple computer instructional settings, static and mobile computer instructional settings).
- f. Demonstrate knowledge of strategies for managing computer-based technology activities along with other classroom activities.
- g. Demonstrate the ability to plan learning activities that include appropriate information literacy skills.
- h. Identify and use appropriate technologies for addressing a variety of student special needs and learning modalities.
- i. Demonstrate an understanding of methods for assessing student learning activities that integrate computer-based technologies.

3.2 Understanding Criteria for Evaluating and Selecting Software and Electronic Learning Media

- a. Demonstrate an understanding of established criteria for evaluating and selecting software and electronic learning media, including alignment with content standards; alignment with instructional strategy; appropriateness for students' reading and vocabulary levels; appropriateness for students' needs (e.g., differing learning modalities, special needs, language abilities); quality and quantity of useful information; relevance and clarity of objectives; logical development, organization, and flexibility; effectiveness of user interface; hardware and operating system requirements; district and school policy requirements; and the presence and effectiveness of built-in assessment tools.